

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,497	10/509,497 05/25/2005		Kai Weeber	10191/3899 4047	
26646	7590	11/06/2006		EXAMINER	
KENYON ONE BRO		ON LLP	SCHWARTZ, CHRISTOPHER P		
NEW YORK, NY 10004				ART UNIT	PAPER NUMBER
				3683	

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

o	Application No.	Applicant(s)					
Office Action Commence	10/509,497	WEEBER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Christopher P. Schwartz	3683					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on							
<u> </u>	•						
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>13-28</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>13-28</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:							
1.⊠ Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te Municipal for					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5)	(PTO-413) te atent Application CHRS PRIMARY Eximilities					

Application/Control Number: 10/509,497 Page 2

Art Unit: 3683

#### **DETAILED ACTION**

1. Claims 1-12 have been canceled. Claims 13-28 are currently pending.

## Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 13-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 13, 22 and 27 applicants claim "A method for detecting a malfunction of a brake system of a motor vehicle, at least two operating modes *possibly* present during activation of the brake system..." They then claim detecting a malfunction in first and second manners when first and second operating modes are present. First the claim limitation "possibly" with respect to the two operating modes in the preamble renders the claim confusing since the body of the claim requires two operating modes to be present. Second it is unclear how the limitations after the word "comprising" lend themselves to "A method for detecting a malfunction of a brake system of a motor vehicle..." as claimed in the preamble since these limitations are not correlated or tied together. Therefore no "method" for detecting a malfunctioning brake system has positively been claimed.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 10/509,497 Page 3

Art Unit: 3683

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 13,15,21,22,24,26,27 are rejected under 35 U.S.C. 102(b) as anticipated by Schmidt et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schmidt et al. in view of Fennel et al. '039 or Diehle et al.

Regarding claims 13,22,27 subject to the 112 rejection of the claims above and as broadly claimed, Schmidt et al. discloses a "method" for detecting a malfunction of a brake system. Schmidt et al. discusses in column 3 lines 15+ what happens to the setpoint wheel brake pressures during *normal* operation of the brake. Near the top of column 4 Schmidt also discussed what operation variables are detected by the system and that in one embodiment (the program shown in figure 3) "...ascertains individual fault conditions in the area of pressure modulation, or rather of the components implementing the pressure modulation. The sketched program runs during the entire operating cycle, partly during secondary braking operation as well, at predefined points of time." In column 5 line 33 Schmidt et al. discusses the different types of faults the system may detect should the brake system enter into dynamic movement control or traction control. Presumably, this includes ABS control as well.

Therefore, from the discussion in Schmidt et al. it would appear this system is capable of detecting a malfunction in "a first manner" and "in a second manner" (as broadly claimed) during normal braking or during ABS or ASR or FDR—that is detecting that a malfunction has occurred in one of several of the brake components (i.e. valves, pressure sensors, accumulator—corresponding to the several fault numbers listed) as shown by the several branches in figure 3.

However, there is no direct statement in Schmidt etal. that first and second operating modes are present during activation of the brake—that is when the system is in normal braking and when it is in ABS.

However as discussed in Fennel column 2 lines 22+ it is stated "... it is known to regularly test the reaction of the front wheels to the braking pressure in order to enhance the operational reliability of a brake system with electronic brake force distribution control..." Fennel does this in order to maintain the functioning, to the extent possible, of the brake force distribution/ABS systems to maintain control of the vehicle.

Diehle et al. teaches a similar system to that of Fennel—namely a system that can detect a variety of faults in one of the speed sensors, brake pedal switch, return pump or outlet valve on the rear axle etc. and adapt the functioning of the braking force control and ABS systems accordingly. See columns 2 and 3.

Therefore, in order to optimize fault detection capability and to have the braking system best able to respond accordingly the ordinary skilled worker in the art at the time

Art Unit: 3683

of the invention would have found it obvious to have modified the system of Schmidt et al. so that it can determine its faults during normal braking and during ABS.

Regarding claims 15,21,24,26, as broadly claimed, these requirements are met.

7. Claims 14,23,25,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al. in view of either Fennel or Diehle et al as applied to claims 13,22,27 above, and further in view of Harris et al.

Regarding claims 14,23,25,28 although probably redundant, Harris et al. is relied upon for a more explicit description of detecting a malfunction of a wheel pressure sensor suite, as discussed in the abstract, but more particularly in columns 3 and 4. To have modified the system of Schmidt et al. with these teachings would have been obvious given the close similarity of these references.

8. Claims 16,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al. in view of either Fennel or Diehle et al as applied to claims 13,22,27 above, and further in view of Sakamoto et al.

Regarding claims 16,17, as broadly claimed, Sakamoto et al. teaches a known Method of using a difference between the output signals of a pair of wheel pressure sensors compared to a threshold value to determine whether a fault exists. Such a known method could be incorporated into Schmidt et al. Applicant's method is simply an obvious alternative equivalent to that taught by Sakamoto et al. of determining an error with one of the sensors. Applicant's lack any criticality in the specification for their method outlined in claims 16,17, as broadly claimed.

## Allowable Subject Matter

Page 6

9. Claims 18-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see the braking systems which also detect malfunctions in their systems. These references have also been relied upon, in part, to reach the conclusions of obviousness above.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cps 11/1/06